

## ABSTRACT

[0040] A method of connecting one or more testing devices to ports of a DUT through a switching network, to execute a testing procedure includes generating a switching network map defining connections within the switching network to implement electrical paths through the switching network. Each of the electrical paths is representative of a connection of one of the testing devices to one of the I/O ports of the DUT. The method further includes receiving commands that uniquely specify an electrical path connecting a particular testing device to a particular I/O port of the DUT. The method compares each command to the switching network map to identify a corresponding electrical path through the switching network, and implements that path associated the command through the network. The method further includes sequentially implementing the electrical paths corresponding to the one or more commands in a predetermined order.